ABSTRACT

A pressure relief arrangement is provided for a housing for a circuit interrupter or the like that utilizes rupture disc members that are loaded in shear in response to overpressures. Fastening members, e.g. bolts retain a cover or end plate with respect to an end flange of the housing and apply force to the rupture disc members. Upon predetermined overpressure conditions within the interior of the housing relative to the exterior, the pressure relief arrangement operates to separate the cover and the end flange thus releasing the seal therebetween and venting the overpressure between the cover and the end flange. The rupture disc member is fabricated to become disintegral under the predetermined overpressure conditions so as to release the cover. Each rupture disc is loaded in shear and is fabricated with predetermined portions of reduced cross section to focus the applied force. When the force exceeds the shear strength of the material, one or more of the rupture disc members break, the remaining load on the other rupture disc members increasing and causing them to break successively. Specifically, the each rupture disc member includes reduced section portions to appropriately shear the rupture disc member under the loading of the predetermined overpressure conditions.